

News Release

Alexco Reports Fourth Quarter and Year End 2016 Results

March 29, 2017 - Alexco Resource Corp. (NYSE-MKT:AXU, TSX:AXR) ("Alexco" or the "Corporation") today reports financial results for the fourth quarter and year ended December 31, 2016. All figures are expressed in Canadian dollars unless otherwise stated. For the fourth quarter of 2016 Alexco recorded a net loss of \$1.8 million ("M") or \$0.02 per share, including \$0.7 M in depreciation and other non-cash costs. Alexco Environmental Group ("AEG") recorded revenues of \$11.4 M for the year ended December 31, 2016, with an annual gross profit of \$2.9 M, achieving a gross margin of 25.2%. For the full year 2016 Alexco recorded a net loss of \$4.4 M or \$0.05 per share, including \$3.2 M in depreciation, share-based compensation expense and other non-cash costs offset by a gain of \$2.7 M on investments held. The working capital position at year end was \$23.4 M.

2016 Highlights

- Improving and strong unrestricted cash position with cash and cash equivalents at December 31, 2016 of \$20.4 M and net working capital of \$23.4 M compared to \$8.2 M and \$12.6 M, respectively, at December 31, 2015.
- The Corporation completed its 2016 Bermingham diamond drill program at Keno Hill with 50 holes for a total of 17,371 meters ("m"). Drill results extended the previously defined Arctic Zone of silver mineralization and outlined a new zone of high grade silver mineralization beginning approximately 160m from surface and extending at least 270m down plunge.
- On May 17, 2016, the Corporation closed a non-brokered private placement of units of the Corporation ("Units") at a price of \$1.20 per Unit pursuant to which the Corporation issued 10,839,972 Units for aggregate gross proceeds of \$13,007,966.
- 4,364,575 warrants were exercised for proceeds of \$6.2 M.
- Investments in marketable securities were disposed of for proceeds of \$1.8 M and a pre-tax realized gain of \$1.5 M. In addition, warrants held as an investment had a pre-tax fair value measurement adjustment increase of \$1.2 M.
- AEG, recognized revenues of \$11.4 M in 2016 for a gross profit of \$2.9 M and a gross margin of 25.2%.
- A performance bond was released to Alexco in the amount of \$3.8 M (US\$2.9 M) related to the AEG's Globeville Smelter Project in Denver Colorado.

Highlights Subsequent to 2016

• The Corporation announced an updated mineral resource estimate for the Bermingham deposit, expanding the indicated mineral resources from 5.2 M ounces to 17.3 M ounces while inferred mineral resources increased from approximately 0.7 M ounces to 5.5 M ounces of contained silver.

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- Alexco released an updated National Instrument 43-101 compliant Preliminary Economic Assessment ("PEA") for its 100% owned Keno Hill Silver District in Canada's Yukon Territory ("KHSD PEA") and announced an amended silver purchase agreement (the "Amended SPA") with Silver Wheaton Corp. ("Silver Wheaton") (see news release dated March 29, 2017 entitled "Alexco and Silver Wheaton Amend Silver Purchase Agreement and Alexco Announces Positive Preliminary Economic Assessment for Expanded Silver Production at Keno Hill").
- Investments in marketable securities were disposed of for proceeds of \$2.0 M and a pre-tax realized gain of \$1.8 M.
- Alexco entered into a non-binding Letter Agreement with Banyan Gold Corp. ("Banyan") to option up to 100% of Alexco's McQuesten property located in the KHSD. In three stages, Banyan may earn up to 100% of the McQuesten property, by incurring a minimum of \$2.6 M in exploration expenditures, issue 1.6 M shares, pay a total of \$2.6 M in cash or shares and grant Alexco a 6% Net smelter return ("NSR") royalty with buybacks totalling \$7 M to reduce to a 1% NSR royalty on gold and 3% NSR royalty on silver.

Alexco's President and Chief Executive Officer Clynt Nauman said, "A lot was accomplished by Alexco in 2016, nothing more important than our exploration success at Bermingham along with raising additional capital, establishing the portal for our Flame & Moth underground access and commencing an updated Keno Hill Preliminary Economic Assessment subsequently completed in March 2017. With the March 29, 2017 announcement of a Silver Wheaton amended silver purchase agreement, Alexco launches into 2017 squarely focused on moving forward with additional surface exploration, underground exploration and development, mill upgrades, and preparation of a prefeasibility level study, all necessary steps on the way to a final production decision."

Summary Financial Results and Information

(expressed in thousands of dollars, except per share amounts)	Three Months Ended December 31		Year Ended December 31	
	2016	2015	2016	2015
Environmental services revenue	2,939	4,128	11,361	14,662
Gross profit from environmental services	881	611	2,866	3,251
Loss before taxes	(1,579)	(1,765)	(3,967)	(6,616)
Net loss	(1,761)	(1,502)	(4,359)	(5,509)
Total comprehensive loss	(1,893)	(1,539)	(4,111)	(6,037)
Loss per share – basic and diluted	(\$0.02)	(\$0.02)	(\$0.05)	(\$0.08)
Cash flows consumed from operating activities	(1,156)	(905)	(4,608)	(4,391)

Keno Hill Silver District PEA

On March 29, 2017, Alexco announced the release of an independent technical report with an effective date of January 3, 2017 prepared by Roscoe Postle Associates Inc. ("RPA") entitled "Preliminary Economic Assessment of the Keno Hill Silver District Project, Yukon, Canada" (the "PEA").

Highlights of the revised PEA include:

• Alexco's project pre-tax and after-tax net present value ("NPV") is \$104.3 M and \$79.4 M (at a 5% discount rate), respectively, and pre-tax and after-tax internal rate of return ("IRR") is 89% and 75%, respectively, at assumed silver prices of US\$18.60/oz in 2018 and US\$19.35/oz in 2019 through 2025.



- At current spot metal prices and US/Cdn foreign exchange rate (as of March 27, 2017), the project has a pre-tax and after-tax NPV of \$121.1 M and \$90.5 M (at a 5% discount rate), respectively, and a pre-tax and after-tax IRR of 92% and 78%, respectively.
- Average annualized mill throughput is 143,000 tonnes per year over an eight year period at an average feed grade of 843 grams per tonne ("g/t") silver ("Ag"), 3.3% lead ("Pb"), 4.6% zinc ("Zn") and 0.39 g/t gold ("Au").
- Payable production is anticipated to be a total of approximately 25.1 M ounces of silver, 77.3 M pounds ("lbs") of zinc, 67 M lbs of lead and 4,870 ounces of Au over an eight (8) year mine life. Average annualized payable silver production is 3.5 M ounces per year, with the initial three years of annualized payable silver production averaging 4.1 M ounces per year.
- Initial capital costs of \$27 M are estimated to achieve production and positive cash flow with less than one year payback.

In addition, upon achieving commercial production, Alexco has calculated all-in sustaining costs ("AISC") (contained silver, by-product basis) over LOM to be US\$13.51/oz of silver (including direct operating costs, sustaining capital, the Silver Wheaton stream, corporate general and administrative and ongoing surface exploration costs), and AISC over the first full three (3) years of production to be US\$12.18/oz of silver.

Amended Silver Purchase Agreement with Silver Wheaton

On March 29, 2017 the Corporation and certain of its subsidiaries and Silver Wheaton entered into an amendment agreement to the Silver Purchase Agreement (the "Amended SPA") pursuant to which, among other things, the following amendments were made to the Silver Purchase Agreement:

- Silver Wheaton will continue to receive 25% of the life of mine payable silver from the KHSD. The production payment (originally US\$3.90 per ounce) will be based on monthly silver head grade and monthly silver price.
- The actual monthly production payment will fall within a defined grade and pricing range governed by upper and lower numeric criteria (ceiling grade/price and floor grade/price) pursuant to the following formula:

	(Ceiling Grade – Deemed Shipment Head Grade)		(Ceiling Price – Deemed Shipment Silver Price)		X	Market	
	(Ceiling Grade – Floor Grade)	(Ceiling Price – Floor Price)			Λ	Price	
	Floor Grade		=	600 g/t Ag			
	Floor Price		=	US\$13/oz Ag			
	Ceiling Grade		=	1,400 g/t Ag			
	Ceiling Price		=	US\$25/oz Ag			
	Deemed Shipment Head Grade		e =	Calculated mont	monthly mill silver head grade		
Deemed Shipment Silver Price			=	Average monthl	Average monthly silver price		
	Market Price		=	Spot silver price	prior to	day of sale	



- The date for completion of the 400 tonne per day mine and mill completion test date was extended to December 31, 2019;
- The Silver Wheaton area of interest remains one (1) km around existing Alexco holdings in the KHSD.

In consideration of the foregoing amendments, the Corporation has agreed, subject to TSX and NYSE-MKT approval, to issue 3,000,000 shares to Silver Wheaton with a fair value of US\$4,934,948.

Keno Hill Exploration and Development

2017 Exploration Program

The Corporation has planned a surface exploration program of approximately 12,000m surface diamond drilling budgeted to cost \$3.2 M primarily to further explore structural targets in the immediate vicinity of the Bermingham area. The bulk of the surface exploration will be conducted in the summer with results expected to be released no later than the fourth quarter of 2017.

The Corporation is also planning an underground exploration program at the Bermingham prospect. Subject to permitting, an exploration decline will be driven 600m and approximately 5,000m of infill and confirmation drilling will be completed for a total estimated cost of \$8.7 M (including underground equipment rebuilds and purchase). The timeline and costs incorporate management's estimates for the necessary permits required to carry out the development of the Bermingham exploration decline; permitting uncertainty and delays may cause timelines and costs to increase.

2016 Exploration Program

The Corporation completed an exploration program totalling 50 holes for 17,371m of surface diamond drilling to follow up on prior identification of high grade silver results at the Bermingham prospect. A total of \$3.4 million was invested in an expanded exploration program, the majority funded by way of a \$3 million flow-through financing in December 2015. The Corporation expended an additional \$300,000 to gather geotechnical and hydrogeological information, as well as undertake a preliminary metallurgical program to test the Bermingham mineralization. Interim drill results on 18 holes were released on September 13, 2016 (see September 13, 2016 press release entitled "Alexco Confirms, Expands High Grade Silver Zone at Bermingham Deposit; Drilling Continues") with the final results of the final 32 of 50 drill holes released on December 8, 2016 (see December 8, 2016 press release entitled "Alexco expands Bermingham Silver Deposit, Initial Tests Confirm Excellent Metallurgical Performance").

Other Development

In October the Company completed installation of the underground portal and infrastructure at the Flame & Moth deposit and drove the first 20m of the production ramp. This will allow resumption of development activities to begin at full scale in the future. This ramp will ultimately be driven to the upper production levels of the Flame & Moth silver deposit.

The Corporation also completed a mill maintenance program in 2016. Additionally, a mechanical assessment and maintenance of equipment was part of the routine process of maintaining operating assets in a condition where resumption of processing operations could be completed.

Permitting

As a result of the Company filing an updated Reclamation and Closure Plan for its current operations and the future development of the Flame & Moth deposit, the Quartz Mining License ("QML") required that Alexco increase its posted security from \$4.2 M to \$6.3 M. On July 26, 2016 the Corporation posted the additional \$2.1 M in cash for



security and is currently working with the Yukon Government to substitute a portion of the cash posted in exchange for a pledge of assets.

The Company expects a Water Use License amendment hearing to occur in the second quarter of 2017, which is the final remaining permit required to commence mining operations at the Flame & Moth deposit.

The Corporation plans to drive an underground exploration decline 600m at the Bermingham deposit, which will require an amendment to its Class IV permit. This is expected to be received by the end of the second quarter of 2017 although delays can occur in the Yukon permitting process as a result of changing laws, regulations and policies in the environmental assessment process.

Alexco Environmental Group

In 2016 Alexco Environmental Group ("AEG"), recognized revenues of \$11.4 M in 2016 for a gross profit of \$2.9 M and a gross margin of 25.2% compared to revenues of \$14.7 M in 2015 for a gross profit of \$3.3 M and a gross margin of 22.2%. The increase in gross margin from the prior year was primarily due to AEG reducing third party work on both external projects and for the Keno Hill Reclamation Plan. The reduction in revenue was primarily due to the bulk of Keno Hill Reclamation Plan being developed in 2015 and then entering the review stage of the process in 2016, which involved less billable work to be performed by AEG. Furthermore, in the US a decrease in revenues resulted from the substantial completion of the Globeville project in Colorado in 2015.

AEG is successfully operating two major water treatment facilities in the US, the Gold King and Schwartzwalder plants, as well as four smaller water treatment facilities at Keno Hill in Canada.

At the Gold King Project in southern Colorado, the US Environmental Protection Agency authorized an expansion of the plant to approximately double the treatment capacity of the IWTP. Construction related to this and upgrades were completed in 2016. AEG has been awarded an extension to operate Gold King the IWTP to the end of 2017.

On the Globeville Smelter Project, a Completion Report, which documents the work completed at the site and the monitoring results, was submitted to the State of Colorado in July 2016. The Completion Report triggered the release of \$3.8 M (US\$2.9 M) to AEG with the remaining \$522,000 (US\$398,000) to be held as a performance bond for a period up to 2 years.

Financial

Alexco's cash and cash equivalents at December 31, 2016 totaled \$20.4 M compared to \$8.2 M at December 31, 2015, while net working capital totaled \$23.4 M compared to \$12.6 M for the same dates. In addition, the Corporation's restricted cash and deposits at December 31, 2016 totalled \$6.9 M compared to \$8.9 M at December 31, 2015. With its cash resources and net working capital on hand at December 31, 2016, Alexco anticipates it will have sufficient capital resources to carry out all of its currently-anticipated exploration programs, environmental services business and corporate offices and administration as planned for 2017.

Financial Report and Conference Call for Fourth Quarter and Year End 2016

Full details of the financial and operating results for the year ended December 31, 2016 are described in Alexco's consolidated financial statements with accompanying notes and related Management's Discussion and Analysis. These documents and additional information on Alexco, including its annual information form, are available on the Company's website at www.alexcoresource.com and on SEDAR at www.seca.gov/edgar.shtml.

Alexco is holding an audio webcast conference call to discuss these results at 11:00a.m. Eastern (8:00 a.m. Pacific) on Thursday, March 30, 2017. To participate in the live call, please use one of the following methods:



Dial toll free from Canada or the US: 1-888-504-7961
Dial from outside Canada or the US: 1-647-792-1278

Conference ID #: 4158221

Live audio webcast: www.alexcoresource.com

Participants should connect five to ten minutes before the call.

The conference call will be recorded, and an archived audio webcast will be available at www.alexcoresource.com.

Qualified Persons

The disclosure in this news release of scientific and technical information regarding exploration projects on Alexco's mineral properties has been reviewed and approved by Alan McOnie, FAusIMM, Vice President, Exploration, who is a Qualified Persons as defined by National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*.

About Alexco

Alexco Resource Corp. owns the Bellekeno silver mine, one of several mineral properties held by Alexco which encompass substantially all of the historical KHSD located in Canada's Yukon Territory. Employing a unique business model, Alexco also provides mine-related environmental services, remediation technologies and reclamation and mine closure services to both government and industry clients through the Alexco Environmental Group, its wholly-owned environmental services division.

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Certain statements ("forward-looking statements") in this news release contain forward-looking information concerning the Company's anticipated results and developments in the Company's operations in future periods, planned exploration and development of its properties, plans related to its business and other matters that may occur in the future, made as of the date of this news release. Forward-looking statements may include, but are not limited to, statements with respect to the future remediation and reclamation activities, future mineral exploration, the estimation of mineral reserves and mineral resources, the realization of mineral reserve and mineral resource estimates, future mine construction and development activities, future mine operation and production, the timing of activities and reports, the amount of estimated revenues and expenses, the success of exploration activities, permitting time lines, requirements for additional capital and sources and uses of funds. Forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors which could cause actual events or results to differ from those expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results and timing of exploration and development activities; actual results and timing of mining activities; actual results and timing of environmental services activities; actual results and timing of remediation and reclamation activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of silver, gold, lead, zinc and other commodities; possible variations in mineable resources, grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; First Nation rights and title; continued capitalization and commercial viability; global economic conditions; competition; and delays in obtaining governmental approvals or financing or in the completion of development activities. Forward-looking statements are based on certain assumptions that management believes are reasonable at the time they are made. In making the forwardlooking statements included in this news release, the Company has applied several material assumptions, including, but not limited to, the assumption that the Company will be able to raise additional capital as necessary, that the proposed exploration and development will proceed as planned, and that market fundamentals will result in sustained silver, gold, lead and zinc



demand and prices. There can be no assurance that forward-looking statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. The Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as otherwise required by applicable securities legislation.